We claim:

1. A diffraction grating, comprising:

a movable component, comprising a plurality of cross beams coupled to two long beams, wherein the two long beams are parallel to one another; and

a stationary component, comprising a plurality of projecting beams, wherein the cross beams are alternately disposed between the projecting beams; wherein a plurality of square wells are formed when the movable component is actuated and diffraction parallel to the long beams occurs when light strikes the square wells.

2. The diffraction grating of claim 1, wherein the plurality of cross beams are coupled between the two long beams.

3. The diffraction grating of claim 1, further comprising:

a base piece for coupling the plurality of projecting beams.

4. The diffraction grating of claim 1, the projecting beams comprising a first surface and the cross beams comprising a second surface, wherein the first and second surfaces comprise a substantially planar surface when the movable component is not actuated.

5. The diffraction grating of claim 4, wherein the first surface comprises a reflective surface.

6. The diffraction grating of claim 4, wherein the second surface comprises a reflective surface.

7. The diffraction grating of claim 1, the plurality of square wells further comprising:

a first square well having a first dimension;

a second square well having a second dimension, wherein the second dimension is smaller than the first dimension; and

a third square well having a third dimension, wherein the third dimension is smaller than the second dimension;

wherein the first square well diffracts light of a first wavelength, the second square well diffracts light of a second wavelength, and the third square well diffracts light of a third wavelength.

8. The diffraction grating of claim 7, wherein the first wavelength is the wavelength of red light.

9. The diffraction grating of claim 8, wherein the second wavelength is the wavelength of green light.

10. The diffraction grating of claim 9, wherein the third wavelength is the wavelength of blue light.

11. A diffraction grating, comprising:

a movable component, comprising a plurality of cross beams coupled to two long beams, wherein the two long beams are parallel to one another; and

a stationary component, comprising a plurality of projecting beams, wherein the cross beams are alternately disposed between the projecting beams; wherein a plurality of square wells are formed when the movable component is not actuated and diffraction parallel to the long beams occurs when light strikes the square wells.

12. The diffraction grating of claim 11, the projecting beams comprising a first surface and the cross beams comprising a second surface, wherein the first and

second surfaces comprise a substantially planar surface when the movable component is actuated.

13. A diffraction grating, comprising:

a movable component, comprising a plurality of projecting beams coupled to one or more long beams; and

a stationary component, comprising a plurality of stationary beams, wherein the projecting beams are alternately disposed between the stationary beams;

wherein a plurality of square wells are formed when the movable component is actuated such that diffraction parallel to the long beam occurs when light strikes the square wells.

14. The diffraction grating of claim 13, the projecting beams comprising a first surface and the stationary beams comprising a second surface, wherein the first and second surfaces comprise a substantially planar surface when the movable component is not actuated.

15. The diffraction grating of claim 14, wherein the first surface comprises a reflective surface.

16. The diffractive grating of claim 14, wherein the second surface comprises a reflective surface.

17. The diffraction grating of claim 13, the plurality of square wells further comprising:

a first square well having a first dimension;

a second square well having a second dimension, wherein the second dimension is smaller than the first dimension; and

a third square well having a third dimension, wherein the third dimension is smaller than the second dimension;

wherein the first square well diffracts light of a first wavelength, the second square well diffracts light of a second wavelength, and the third square well diffracts light of a third wavelength.

18. The diffraction grating of claim 17, wherein the first wavelength is the wavelength of red light.

19. The diffraction grating of claim 18, wherein the second wavelength is the wavelength of green light.

20. The diffraction grating of claim 19, wherein the third wavelength is the wavelength of blue light.

21. A diffraction grating, comprising:

a movable component, comprising a plurality of projecting beams coupled to one or more long beams; and

a stationary component, comprising a plurality of stationary beams, wherein the projecting beams are alternately disposed between the stationary beams;

wherein a plurality of square wells are formed when the movable component is not actuated such that diffraction parallel to the long beam occurs when light strikes the square wells.

22. The diffraction grating of claim 21, the projecting beams comprising a first surface and the stationary beams comprising a second surface, wherein the first and second surfaces comprise a substantially planar surface when the movable component is actuated.

23. A diffraction grating, comprising:

a means for moving a plurality of movable beams between a plurality of stationary beams, wherein the plurality of movable beams are coupled to one or more long beams, and the plurality of movable beams are alternately disposed between the stationary beams;

wherein a plurality of square wells are formed when the plurality of movable beams are actuated, wherein diffraction parallel to the one or more long beams occurs when light strikes the square wells.

24. The diffraction grating of claim 23, further comprising:

a means for coupling the plurality of stationary beams.

25. The diffractive grating of claim 24, further comprising:

a means for actuating the movable component.

26. The diffraction grating of claim 25, the movable beams comprising a first surface and the stationary beams comprising a second surface, wherein the first and second surfaces comprise a substantially planar surface when the diffraction grating is not actuated.

27. The diffraction grating of claim 26, further comprising:

a means for reflecting light off the first and second surfaces.

28. A diffractive grating, comprising:

a plurality of blocks arranged in a row, the row being disposed atop a substrate, wherein each of the plurality of blocks can be independently moved toward or away from the substrate;

wherein a plurality of square wells are formed when selected blocks are moved such that diffraction occurs when light strikes the square wells.

29. The diffraction grating of claim 28, wherein the selected blocks are alternating blocks in the row.

30. The diffraction grating of claim 28, wherein the diffraction occurs in a direction parallel to the row.

31. The diffraction grating of claim 28, wherein the square wells are formed when selected blocks are moved toward the substrate.

32. The diffraction grating of claim 28, wherein the square wells are formed when selected blocks are moved away from the substrate.

33. The diffraction grating of claim 28, further comprising an array comprising a plurality of rows.

34. The diffraction grating of claim 33, wherein diffraction occurs in a direction perpendicular to the plurality of rows.

35. The diffraction grating of claim 33, wherein the diffraction occurs in a direction perpendicular to the plurality of rows and in a direction parallel to the plurality of rows.

36. The diffraction grating of claim 33, wherein the diffraction occurs simultaneously in a direction perpendicular to the plurality of rows and in a direction parallel to the plurality of rows.

37. The diffraction grating of claim 28, wherein the blocks are arranged in a plurality of adjacent groups, each group including a first group row and a second group row, wherein a first block and a second block occupy the first group row and a third block and a fourth block occupy the second group row.

38. The diffraction grating of claim 37, wherein the second block and the third block are actuated while the first block and the fourth block are not actuated, wherein diffraction occurs both perpendicular and parallel to the row.

39. The diffraction grating of claim 37, wherein the first block and the fourth block are actuated while the second block and the third block are not actuated, wherein diffraction occurs both perpendicular and parallel to the row.

40. The diffraction grating of claim 37, wherein the third block and the fourth block are actuated while the first block and the second block are not actuated, wherein diffraction occurs perpendicular to the row.

41. The diffraction grating of claim 37, wherein the first block and the second block are actuated while the third block and the fourth block are not actuated, wherein the diffraction occurs perpendicular to the row.

42. The diffraction grating of claim 37, wherein the first block and the third block are actuated while the second block and the fourth block are not actuated, wherein the diffraction occurs parallel to the row.

43. The diffraction grating of claim 37, wherein the second block and the fourth block are actuated while the first block and the third block are not actuated, wherein the diffraction occurs parallel to the row.

44. The diffraction grating of claim 37, wherein one block of an adjacent group is actuated while remaining blocks of the adjacent group are not actuated, wherein the diffraction occurs both perpendicular and parallel to the row.

45. The diffraction grating of claim 37, wherein one block of an adjacent group is not actuated while remaining blocks of the adjacent group are actuated, wherein the diffraction occurs both perpendicular and parallel to the row.

46. A method, comprising:

disposing a movable component against a stationary component, wherein the movable component comprises a plurality of cross beams coupled to at least one long beam and the stationary component comprises a plurality of projecting beams; and

actuating the movable component to a plurality of square wells, wherein diffraction parallel to the at least one long beam occurs when light strikes the square wells.

47. The method of claim 46, further comprising:

coating the movable component and the stationary component with a reflective material such that a substantially reflective surface is formed when the movable component is not actuated.

48. A method, comprising:

disposing a plurality of blocks in an array, the array comprising a plurality of rows, wherein each block can be independently actuated;

actuating one or more blocks such that a plurality of square wells are formed, wherein diffraction occurs when light strikes the plurality of square wells.

49. The method of claim 48, further comprising:

actuating a first selection of the plurality of blocks such that diffraction occurs in a direction parallel to the plurality of rows.

50. The method of claim 48, further comprising:

actuating a second selection of the plurality of blocks such that diffraction occurs in a direction perpendicular to the plurality of rows.

51. The method of claim 48, further comprising:

actuating a third selection of the plurality of blocks such that diffraction occurs in a direction both parallel and perpendicular to the plurality of rows.

52. A monochromator, comprising:

a first mirror for receiving light from a first slit;

a second mirror for reflecting light to a second slit; and

a grating for receiving light from the first mirror and reflecting light to the second mirror, wherein the grating comprises:

a movable component, comprising a plurality of cross beams coupled to two long beams, wherein the two long beams are parallel to one another; and

a stationary component, comprising a plurality of projecting beams, wherein the cross beams are alternately disposed between the projecting beams; wherein a plurality of square wells are formed when the movable component is actuated and diffraction parallel to the long beams occurs when light strikes the square wells.

53. The monochromator of claim 52, wherein the grating further comprises a reflective coating.

54. A monochromator, comprising:

a concave mirror having a first reflective surface and a second reflective surface; and

a grating, comprising a plurality of blocks in a row, wherein each of the plurality of blocks can be independently actuated such that a plurality of square wells are formed for diffracting light;

wherein light received by the monochromator is reflected off the first reflective surface to the grating, then diffracted to the second surface.

55. The monochromator of claim 54, wherein the grating is further coated with a reflective material.